



“Tuttak Drava” an effective treatment in *Ahiputana* – A case study.

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Abstract:

Tuttha also known as “Copper Sulphate” is a crystalline aqueous mineral which has been in use in *Ayurveda* since ancient time. “*Tutthak Drava*” which is one of the *ayurvedic kalpa* mentioned by *Rasatarangini* is a *kalpa* of Copper Sulphate. *Tuttha* is widely used in skin conditions as per *ayurvedic* texts and the *kalpas* varies from aqueous solution, creams, ointments, suppositories to upto oral preparation. The respective contain mainly focus on use of “*Tutthak Drava*” (Aqueous solution of copper sulphate i.e. 500mg CuSO₄ in 50ml Water) in skin condition primarily seen in child group i.e. *Ahiputana* (Napkin Rash). In 21st era the use of diapers is profoundly increased and due to lack of hygiene the cases of *Ahiputana* has been increased. *Ahiputana* which is *Kapha-Pitta Pradhan avastha* is subsided by *Kapha-Pittaghna guna* of *Tuttha* along with *Vranaghna*, *Lekhana*, *Kushtaghna* and *Garavishaghna guna* of *Tuttha*. A 6 months old female child suffering from *Ahiputana* with complains of erythema, discharge, skin excoriation, burning sensation and tenderness at legion was treated with local application of “*Tuttha Drava*” by cotton pad on legion every 6hrly for 5days. The subject got significant relief within the 5days.

Keywords: *Tuttha*, *Copper Sulphate*, *Blue Vitriol*, *Skin disease*, *Ahiputana*, *Napkin rash*.

Introduction:

Ahiputana, which is also known as diaper dermatitis is a commonly occurring skin condition which further if untreated gets complications and secondary infection. Both *Acharya Sushruta* and *Vagbhatta* has explained *Ahiputana* as a *Rakta-Kaphaj Vyadi*. Which is primarily caused due to unhygiene. Mainly local sweat, urine and stool if not cleaned properly causes this skin condition. The skin irritation caused due to thease waste products causes itching which leads to small papule and skin excoriation. From this papules and excoriated skin oozes secretions which further leads to secondary infections. The drug “*Tuttak Drava*” is nothing but 1-2 percent Aqueous solution of copper sulphate. “*Tutta*” is *Tikta rasatmak* hence it is *Pitta-Kapha shamak* and as it is *Pittaghna* so it is *Raktadoshhara*. If applied locally it is *Grahi*, *Twacya*, *Kushtaghna*, *Vranaghna*, *Vranadoshhara*, *Gara-visha-dosha hara*, *Kandughna* and *Lekhana*. All of these properties helps to relive sign and symptoms like *Kandu*, *lasika strav*, *lalima*, *sphota*, *daha*, *toda*, *Vrana*, *putistrava* present in *Ahiputana*. In the described clinical case 6 months old female child who had complains of *spatika*

pradeshi lalima, Guda pradeshi Vrana, sphota, Daha, Lasika strava from lesion got significant relief from local application of this “*Tuttak Drava*” by cotton pad on lesion within 5days.

A case report as follow :-

A 6month old female child came to us with chief complains of-

- 1) *Guda pradeshi vranotpatti.*
- 2) *Sphiktwak lalima.*
- 3) *Daha.*
- 4) *Sparsha-asahatva.*
- 5) *Lasika strav.*

The child was having complains since 2 days.

History of present illness:

Child was all right prior 2 days since then she started the complains and then came to our hospital – SMBT Ayurveda Hospital OPD for management.

On examination:

<i>Nadi:</i>	<i>110/min</i>
<i>Sparsha: Anushna</i>	
<i>Mala:</i>	<i>Samyak</i>
<i>Druka: Prakrut</i>	
<i>Mutra:</i>	<i>Samyak</i>
<i>Akruti: Madhyam</i>	
<i>Jivha:</i>	<i>Niram</i>
<i>Koshta: Madhyam</i>	
<i>Shabda:</i>	<i>Spashta</i>
<i>Bala: Madhyam</i>	

Local examination:

Erythema – Present.

Skin excoriation – Present.

Small popular eruptions- Present.

Burning sensation (Hypersensitivity to touch) – Present.

Aim: To Study The Efficacy of Tutthak Drava in 6months old female child suffering from Ahiputana.

Objective: To evaluate the effect of Tutthak Drava in a child suffering from Ahiputana.

Secondary Objective:

1. To evaluate the efficacy of Tutthak Drava on the basis of Ayurvedic criteria including “Rasa, Guna, Virya, Vipaka , Samprapti ghatak and Samprapti Bhanga”.

2. To Study the Standard Preparation of Tutthak Drava as per mentioned in texts.

Materials and Methods:

Disease review:

शकृन्मूत्रसमायुक्तेऽधौतेऽपाने शिशोर्भवेत्।

स्विन्नस्यास्नाप्यमानस्य कण्डु रक्तकफोद्धवा।

कण्डुयनात्तः क्षिप्रं स्फोटाः स्रावाश्च जायते।

एकीभूतं व्रणघौरं तं विद्यात अहिपूतनम् ॥

सु.नि.५७-५८/१८.

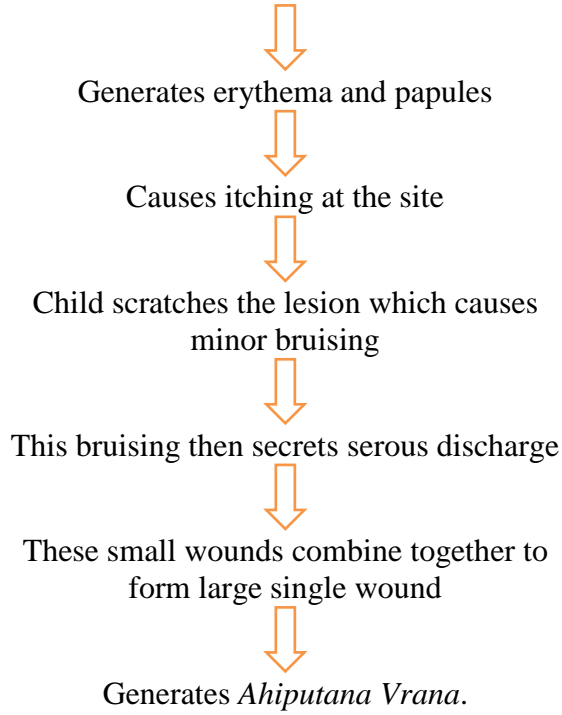
According to Acharya Vagbhatta and Sushruta the *sthanik Mala*, *sweda* causes *rakta* and *kapha dushti*. This *rakta* and *kapha* further disturbs local *dhatu* including *twak* , *rakta* and *mamsa*. This *dhatu dushti* causes local skin irritation, itching and rahses. When child scratches this rashes small wounds are made from which serous discharge is secreted. Further these small wounds combine together to form one large wound which is called “*Ahiputana*” which if not taken good care can go into “*Paaka*” condition. In *Ahiputana* continues contact with local *Mala* i.e *sweda*, *mutra* and *Shakruta* causes formation of *garavisha* at local *mamsa dhatu*. This *vishar ghatak* then causes irritation , inflammation, excoriation and popular eruptions at the skin. Thus to treat the wound caused by these local toxin one must follow the *bahiparimarjana chikitsa* to do *sthanik shodhana* of the skin. Also according to modern studies when the wound is open and has serous discharge it is most likely to get infected with microorganisms. Most commonly occurring staphylococci are leading cause for the “*Paaka*” (secondary infection) condition. This may lead to further eruption of systemic signs and symptoms like fever.

SAMPRAPTI OF AHIPUTANA:

Poor Hygiene, not changing napkin pads
time to time



Causes local irritation to the skin



SAMPRAPTI GHATAK :

Dosha	Pitta, Rakta, Kapha.
Dushya	Rasa, Rakta, Mamsa.
Srotasa	Rasavaha, Raktavaha, Mansavaha.
Srotodushti Prakara	Atipravrutti.
Agni	Bhrajaka Agni.
Udbhavasthana	Guda.
Sanchar sthana	Sphika, Uru, Nitamba.
Adhishthana	Guda.
Rogamarga	Bhaya.
Swabhava	Ashukari.
Sadhyaasadyata	Sadhya.
UpaDrava	Paakotpatti, Tvakvaivarnya.

Drug review:

तुत्थं तु तित्कं त्वच्यं ग्राहि वान्तिकरं परम्।
 कफघ्नमऽथ चक्षुष्यं व्रणदोषनिषूदनम्॥
 उपदंशफिरंगोत्थक्षतशोधनकृत्परम्।
 क्लिष्टवर्त्मप्रशमनं क्षारकर्मकरं स्मृतम्॥ र.त.७६-७७/२१

“Tuttha” is a crystalline solid fragile mineral salt which is soluble in water. Many ancient Ayurvedic texts explained properties and clinical

administration of “Tuttha” in details. “Rasatarangini” described a kalpa named “Tutthak Drava” which is nothing but 1-2% Aqueous solution of Copper sulphate. As “Tuttha” is a toxic drug when taken orally though for *bahirparimarjana chikitsa* it is very useful to cure variety of skin conditions. In *Ahiputana* not only there is wound but also serous discharge and minor bruises are great source of having envision of secondary infection. According to modern studies the Copper sulphate has antimicrobial, antifungal properties which is helpful in such scenario. Also copper sulphate has great efficacy even to resistant staphylococci strains. Thus it is very helpful in “Paaka” condition.

The properties of “Tuttha” according to various *granthakara* as follows:

Rasendrasarasangraha	Katu, Kashaya, Vishada, Laghu, Lekhana, Bhedana, Chakshushya, Krumighna, Kandughna, Vishahara.
Bhaishajyaratnavali	Vishahara, Gadashoolahara, Kushtahara, Amlapittahara, Vibandhahara, Garaghna,
Rasatarangini	Tikta, Twachya, Grahi, Kaphaghna, Chakshushya, Vranadoshahara.

Methods:

Method of preparation of “Tutthak Drava”:
 द्विगुञ्जचतुर्गुञ्जं तुत्थकं निर्मलीकृतम्।
 परिसृते तु सलिले पंचतोलकसंमिते॥

निक्षिपेत् अथ विज्ञाय तुत्थकं सर्वथा द्रुतम्।
तुत्थद्रवं प्रयुंजीत रसतन्त्रविचक्षणः॥ र.तं.७८-
७९/२१

“*Tutthak Drava*” is prepared by adding 2-4 Gunja (250mg-500mg) “*Tutthak*” in 5 Tola(50ml) “*jala*”. That is ; 1 part of *Tuttha* (Copper Sulphate) in 100 part of *Jala* (Distilled Water) in sterile container. When all the salt is dissolved in water then the preparation is ready to use and stored in sterile container for further use.

Dose: As per lesion; every 6 hourly with sterile cotton pad.

Route of administration: Topical application.

Centre of study: SMBT Ayurvedic collage and Hospital, Igatpuri, Nashik.

Method of sampling and study design: Simple randomised single case study.

Result:

Clinical examination of patient on follow up days revealed significant decrease in sign and symptoms *daha*, *lasika strav* and *twak lalima* also *Vrana* was healed within 5 days of drug application.



Day 0



Day 3



Day 5



Day 8

Discussion:

In *Ahiputana* the cause is “*Atipravrutti* of *Doshas*” as the local *Doshas* are vitiated due to improper hygiene. The increased *Doshas* should be levelled and for that *shodhana* is needed. In this case *sthanik shodhana* is more important than *abhyantara shodhana*. As the disease is of *Bahya marga*. So *bahirparimarjana chikitsa* is needed. The drug used in this case is one of the potent

bahirparimarjana drug. The “*Tutthak Drava*” is *sheeta* in *sparsha* so decreases the local *daha* and relives tenderness present at the lesion. The *Kashaya-tikta* rasa helps to level the vitiated *Kapha* and *Pitta Doshas*. *Grahi* and *laghu guna* decreases the *strava* oozing from wound and helps to contract the wound margins.

Vishada, *lekhana guna* cleanse the wound and helps the wound floor for better reepithelization. As “*Tuttha*” it self is one of the *kshara* so it eliminates the local microbes present at the wound site and helps to prevent the “*Paaka*” stage. The *guna* and their *Karmukta* is explained in following chart:

<i>Dravya Guna (Properties of Drug)</i>	<i>Dravya Karmukta (Action of Drug)</i>
<i>Kashaya-Tikta rasa</i>	Balances the vitiated <i>Pitta, Rakta</i> and <i>Kapha Doshas</i> .
<i>Laghu</i>	Balances the <i>Kapha dosha</i> .
<i>Grahi</i>	Decreases the discharges from lesion and helps to bind the wound margins.
<i>Vishada</i>	Cleanse the lesion so helps wound healing.
<i>Lekhana</i>	Cleanse lesion and helps wound healing.
<i>Kushtahara</i>	Balances <i>sthanik Doshas</i> which caused this skin condition.
<i>Visha-Gara-ghna</i>	Eliminates toxins generated at the site due to excessive accumulation of <i>Mala (sthanik sweda, mutra, Shakruta)</i> .
<i>Vranadoshahara</i>	Cleanse wound i.e any discharge, slough or tissue debrides.
<i>Kanduhara</i>	Decreases the local skin irritation by <i>Kaphaghna</i> properties.
<i>Krumihara</i>	Eliminates local <i>Krimi</i> (microbes present in the wound).

Conclusion:

As *Tuttha Drava* is easy to prepare and apply. The properties of drug effectively do *samprapti bhanga* of disease thereby the above case study proves that “*Tutthak Drava*” is effective *ayurvedic* management in child suffering from *Ahiputana*.

Acknowledgement:

This Single case study was supported by Department of Paediatric in SMBT Ayurveda Hospital And College, Dhamangaon, Nashik. We thank Our Guide Dr.Vijay Suryavanshi Sir along with Assistant Professors and our colleagues from Paediatric Department from SMBT hospital who provided insight and their expert opinion which greatly assisted this research case study.

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Conflict of Interest: Non

Source of funding: Nil

Cite this article:

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Ayurlog: National Journal of Research in Ayurved Science- 2020; (8) (2): 01- 06